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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,479

03/25/2004

Hiroshi Abe

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06/08/2006

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EXAMINER

WALSH, RYAN D

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H'A

**Office Action Summary**

Application No.

10/808,479

Applicant(s)

ABE ET AL.

Examiner

Ryan D. Walsh

Art Unit

2852

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 1 and 2 are objected to because of the following informalities: The phrase “HIPS” should be enclosed by parenthesis. Appropriate correction is required.

Claim 2 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation, “wherein said seamless tube comprises a high-impact polystyrene HIPS” fails to further limit claim 1.

### ***Allowable Subject Matter***

The indicated allowability of claim 3 is withdrawn in view of the newly discovered reference(s) to Abe et al. (US Pub. 2003/0161664). Rejections based on the newly cited reference(s) follow.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2 and 4-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 4-8 of U.S. Patent No. 6,771,920 in view of Hosoya et al. (US Pat. # 4,967,231).

Regarding claims 1-2 and 4-6, the U.S. Patent No. '920' claims 1-2 and 4-8 recite each and every element claimed in the present invention except the claimed "wherein said charging roller has a surface of 3.0 .mu.m or less in ten-point average roughness Rz jis 94, and 0.10 mm or less in roughness curve average length RSm, which is taught by Hosoya (see Col. 14, Ln. 44-54)." It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the U.S. Patent No. '920''s invention to include a charging roller that has a surface of 3.0 .mu.m or less in ten-point average roughness Rz jis 94, and 0.10 mm or less in roughness curve average length RSm.

The ordinary artisan would have been motivated to modify the U.S. Patent No. '920''s invention in a manner described above for at least the purpose of decreasing size, reducing the decline of capacity due to protracted use, and precluding the occurrence of dispersion of characteristic, efficiency, or performance (see Hosoya's, Abstract)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. (US Pub. 2003/0161664), hereinafter referred to as Abe, in view of Hosoya et al. (US Pat. # 4,967,231), hereinafter referred to as Hosoya.

Regarding claim 1, Abe teaches, "A charging roller for a contact charging assembly, comprising a conductive substrate (1), an elastic layer (2) which covers the periphery of the conductive substrate, and a seamless tube (3) externally so fitted as to cover the periphery of the elastic layer, wherein said seamless tube constitutes a surface layer of the charging roller (see Fig. 1), wherein said seamless tube comprises: (A) a thermo plastic styrene elastomer [0067], and (B) a high-impact-resistant polystyrene HIPS [0080]; and proportion of the component (A) to the component (B) is (A)/(B)=80/20 to 40/60 in weight ratio (See Abstract of Abe)." Abe does not teach, "wherein said charging roller has a surface of 3.0  $\mu\text{m}$  or less in ten-point average roughness  $R_z$  jis 94, and 0.10 mm or less in roughness curve average length  $R_{Sm}$ ." However, Hosoya teaches, "wherein said charging roller has a surface of 3.0  $\mu\text{m}$  or less in ten-point average roughness  $R_z$  jis 94, and 0.10 mm or less in roughness curve average length  $R_{Sm}$  (see Col. 14, Ln. 44-54)." It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abe's invention to include a charging roller having a surface of 3.0  $\mu\text{m}$  or less in ten-point average roughness  $R_z$  jis 94, and 0.10 mm or less in roughness curve average length  $R_{Sm}$ .

The ordinary artisan would have been motivated to modify Abe's invention in a manner described above for at least the purpose of decreasing size, reducing the decline of capacity due

to protracted use, and precluding the occurrence of dispersion of characteristic, efficiency, or performance (see Hosoya's, Abstract).

Regarding claim 2, Abe teaches, "wherein said seamless tube comprises a high-impact polystyrene HIPS [0080]."

Regarding claim 4, Abe teaches, "wherein said seamless tube comprises a multi-layer structure having a plurality of layers (Fig. 1, ref. # 3 is in 2 layers)."

Regarding claim 5, Abe teaches, "A process cartridge comprising an electrophotographic photosensitive member and the charging roller according to claim 1 which are integrally supported together, and being detachably mountable on a main body of an electrophotographic apparatus (Abstract)."

Regarding claim 6, Abe teaches, "An electrophotographic apparatus comprising an electrophotographic photosensitive member and the charging roller according to claim 1 (Abstract)."

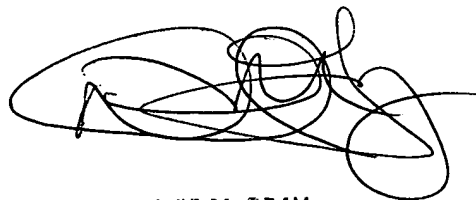
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Walsh whose telephone number is 571-272-2726. The examiner can normally be reached on M-F 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ryan D. Walsh  
Patent Examiner  
Art Unit 2852

A handwritten signature in black ink, appearing to read 'DAVID M. GRAY', with a large, stylized flourish extending from the end of the signature.

DAVID M. GRAY  
PRIMARY EXAMINER